

# Greenroom - A Teacher Community for Collaborative Resource Development

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## ABSTRACT

Developing and sharing teaching material is a significant challenge for users and developers of novel teaching tools and techniques. The Greenroom is a community web site for teachers using the Greenfoot software that provides a novel design to overcome various problems associated with sharing resources and supporting teachers. The Greenroom is of immediate interest for Greenfoot teachers, but also for designers of similar teacher community sites.

## Categories and Subject Descriptors

K.3.2 [Computing Milieux] Computer and Information Science Education

## General Terms

Human Factors.

## Keywords

Greenroom, teachers, community, resources, sharing.

## 1. INTRODUCTION

One of the most significant problems for developers and adopters of new teaching tools and techniques is the problem of acquiring teaching material. New tools and new techniques often require new teaching styles, new assignments, new project ideas, new slides, and sometimes a substantial redesign of a whole course. Few teachers have the time to develop all of these. The result often is that good new tools or ideas are not adopted.

For developers of educational software tools, this is a difficult hurdle to overcome. The software tool itself, however well designed, has no impact at all if it does not offer accompanying teaching material. Good teaching material is what makes adoption easy—or indeed possible—for a broad user base.

The problem is exacerbated when the developers are not in direct contact with the target user group. For example, university researchers often do not have experience in developing material for primary or secondary school level. It is therefore not always feasible for the developers of the tool to create a full range of teaching material suitable for all target teaching groups.

One common method to provide and share teaching material is to create teaching repositories. Many of these exist—*SIGCSE Education Links* [2] is one of them. Experience shows, however, that repositories are generally not very successful. Few resources get uploaded, and relatively few teachers make effective use of them.

## 2. THE GREENROOM

The Greenroom is a community web site for teachers using the Greenfoot software [1] that attempts to overcome these problems. It provides functionality to support a community of teachers in developing, sharing and discussing resources and their teaching.

Several differences to other repositories of teaching material give the Greenroom a significantly different feel, resulting in greater engagement of teachers. These differences include a *community* model of interaction rather than the usual *repository* model. The most immediate interaction has been designed to be between people, not between a user and a repository.

The Greenroom is a protected access site for teachers only, and offers functionality for sharing, searching and browsing of resources, as well as discussion and interaction between teachers. The ownership model for resources differs from other existing repositories: material is not owned by a single creator, but communally owned and edited, following the model that Wikis established for text documents. Facilities for comments on resources and edit trails add value to existing resources.

This model addresses one of the most fundamental problems in sharing teaching material: Resources often exist, but are not shared publicly, because the creator deems them “not good enough”. Often this is accompanied by the goal to improve and share the resource at a later time—that time, however, often does not come. The Greenroom lets teachers share unfinished material, which other teachers can then improve and complete.

The Greenroom can be used immediately by anyone interested in teaching with Greenfoot. In addition, the software platform implementing the Greenroom functionality can be obtained from the authors and adapted to host other teaching communities with a different focus.

The Greenroom is online at <http://greenroom.greenfoot.org/>.

## 3. REFERENCES

- [1] Greenfoot – The Java Object World.  
<http://www.greenfoot.org/>; accessed March 2010.
- [2] SIGCSE Education Links.  
<http://www.sigcse.org/resources/external-links>; accessed March 2010